

MULTI-TAP CAMERA

ABSTRACT OF THE INVENTION

5 A camera comprises a multitap imager, separate
digitizing channels for each imager tap, adjustments for
channel gain and black level, a pattern generator, and a
channel balancer. The channel balancer compares adjacent
pixels and sums the differences in levels over many frames.
10 Any accumulated difference is used as a feedback signal to
drive the summing to a minimum. If the imager is
temporarily hooded, the feedback is used to balance black
levels between the channels. If the imager is operating,
the feedback is used to dynamically adjust the channel gain
15 of one channel to match the other. A pattern generator is
used once during calibration to generate a test pattern in
the digitizing channels that makes it obvious to a
framegrabber how exactly to restitching the various lanes or
zones of the whole image frame back together.

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